

REMARKS

Claims 1-11 currently remain in the application. Claims 10 and 11 are newly added claims. No claims are herein amended.

Claims 1, 2 and 4-6 were rejected under 35 U.S.C. 102 as being anticipated by Cohen, claims 3 and 7 were rejected under 35 U.S.C. 103 over Cohen in view of Shiohara, and claims 8 and 9 were rejected under 35 U.S.C. 103 over Cohen. In summary, as stated in Paragraph 2 of the Official Letter, the Examiner is still finding "the prior arts to teaches (sic)" the claimed limitations in the application. Applicant therefore requests that the Examiner further reconsider the claimed limitation along the following explanatory line because it is the applicant's belief that the cited references do not disclose the present invention as claimed and do not disclose anything capable of making the claimed invention obvious.

The issue which is herein raised by applicant relates to the portion of said Official Letter in page 3 at lines 10-13, which relates to the portion of claim 1 which reads as follows:

selecting said edge pixels sequentially one edge pixel at a time and comparing the direction of said one edge pixel with the direction of another of said edge pixels at a specified distance from said one edge pixel to obtain a comparison result;

and the portion of claim 4 which reads as follows:

comparing means for selecting said edge pixels sequentially one edge pixel at a time and comparing the direction of said one edge pixel with the direction of another of said edge pixels at a specified distance from said one edge pixel to obtain a comparison result.

Both of these portions describe the step of comparing the direction of one edge pixel with the direction of another pixel, the direction of each pixel being defined elsewhere as a direction that makes a specified angle (such as 90 degrees, as shown in Fig. 3) with the density gradient at the position of that pixel. In another words, the comparison is between the direction of one pixel and the direction of another pixel. The cited references do not mention any comparison between the direction of a pixel and the direction of another pixel.

In page 3, lines 10-13 of the Official Letter, the Examiner refers to Fig. 21 of Cohen and cites column 19, lines 29-67. Although Cohen shows directions of many vectors in Fig. 21 and uses expressions such as "comparing" and "direction", Cohen's comparison is between the "edge zone unit direction θ " and the relative position ($\mathbf{r-p}$) of the pixel (at \mathbf{r}) with respect to the edge zone position (\mathbf{p}). This should be clear because it is the scalar product of the two vectors θ and ($\mathbf{r-p}$) that is being mentioned by Cohen at lines 39-40 of column 19 with reference to Fig. 21.

Distinction between the present invention and Cohen can be expressed in more than one way. One way to express would be to say that Cohen compares a pixel with an edge zone position while the comparison according to the present invention is between two pixels. The concept of "edge zone" which plays an important role in Cohen is totally alien to the present invention. Another way to express the distinction would be to say that the comparison carried out according to the present invention is between gradient directions of two pixels where the gradient is defined in the same way for both pixels while Cohen's comparison is between a direction of a pixel (at r) and an "edge zone unit direction" which has a definition totally different from the definition of a pixel's direction.

No matter how Cohen is looked at, Cohen is not talking about the same kind of "comparison" that the claims in the present application. Shiohara was cited evidently for disclosing an edge processing of images by utilizing different filters. Even if both of the cited references are considered in combination, the aforementioned limitations in independent claims 1 and 4 related to comparison between the direction of a pixel and the direction of another pixel cannot be said to result therefrom.

New claims 10 and 11 are herein introduced. It is in part in response to the suggestion by the Examiner in the Office Action dated August 9, 2005 (lines 15-17 of page 2). They are clearly supported by the specification and hence are enterable. They relate to a particular example of the way in which direction of a pixel may be considered (calculated) and hence may be considered to more distinctly bring out the difference between the present invention and what Cohen discloses.

In summary, it is believed that the application is in condition for allowance at least in that the cited references cannot predicate the Examiner's rejection. Allowance at an early date is earnestly solicited.

Respectfully submitted,



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